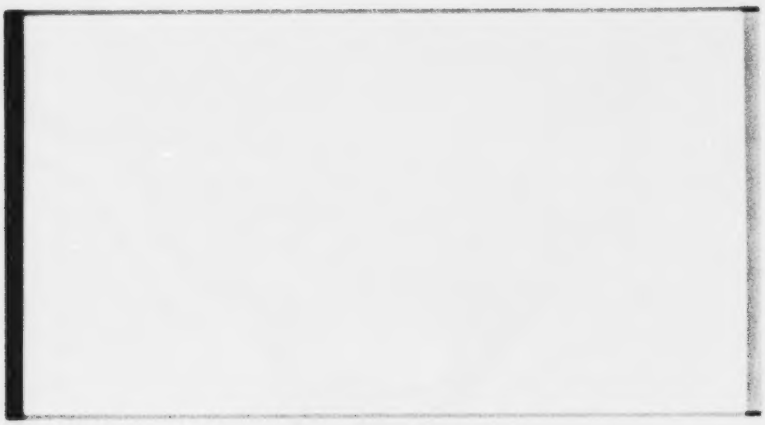
NEW BRUNSWICK
NOUVEAU-BRUNSWICK



Department of Agriculture & Rural Development
Ministère de l'agriculture et de l'aménagement rural

AN ANALYSIS OF THE NEW BRUNSWICK TABLE POTATO SHIPPING INDUSTRY

Report Prepared For the New Brunswick Department of Agriculture and Rural Development

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BACKGROUND

The N.B. Department of Agriculture and Rural Development and the N.B. Potato Shippers Association do not have sufficient information to accurately assess the New Brunswick Table Potato Shipping Industry. Studies in the past have concentrated on developing strategies, obtaining operating financial information, designing information systems, dealing with off-grade potatoes, test marketing new varieties, determining consumer preferences, advertising effectiveness and so on. No comprehensive effort has been undertaken to actually determine the composition and capability of the industry. Without this information the task of identifying problems and opportunities and ways to deal with them is a difficult one.

The industry has experienced a decline in market share in many of New Brunswick's traditional markets. Hopefully, the results of this study can be compared with the demands of the marketplace so that the industry can begin development efforts to reverse present trends.

OBJECTIVES

1. To collect the information required to develop a comprehensive description of the New Brunswick Table Potato Shipping Industry.

2. To identify the volume and nature of cull and off-grade potatoes that are graded out at table potato shipping operations.

3. To determine the level of support for a pallet rental system.

RESEARCH DESIGN

To ensure the highest possible return rate for this study, the following steps were taken:

1. A covering letter, signed by the Deputy Minister of the N.B. Department of Agriculture and Rural Development, was included with each questionnaire.

2. A series of follow-up letters, signed by the Executive Director of the Marketing Division, and questionnaires were sent to shippers who had not responded.

3. A promise of confidentiality and that names of the shippers would not appear on the questionnaire was given.

4. A summary of the results of the study was offered to any shipper who completed and returned a questionnaire.

5. A postage-free, self-addressed return envelope was sent with the questionnaire.

6. Follow-up calls were made to shippers who had not responded or failed to complete the questionnaire satisfactorily.

7. The questionnaire was carefully constructed and tested and all necessary steps followed to ensure potential sources of error were kept to a minimum.

A draft questionnaire was designed after meetings with Departmental marketing and production personnel as well as six shippers. A pretest was carried out with the six shippers and the questionnaire was then sent to all applicable Departmental personnel for final comments. All comments and the results of the pretest were taken into consideration before the final questionnaire was drafted.

The questionnaire was sent to 73 shippers and of these shippers, 43 were found to be actual table potato shippers. A total of 30 (70%) completed and returned the questionnaire.

The questionnaires were originally sent out on June 21, 1983. Follow-up letters were sent on July 13th and August 9th. Another questionnaire was sent with the August 9th letter. During the week of August 29th, all shippers who had not responded were contacted by telephone and as a result six more questionnaires were returned. The final questionnaire was received on Octobers 19, 1983.

EXPLANATION OF FINDINGS

(a) Frequencies

Tables 1 through 23 represent either the addition or average of all responses to each question on the questionnaire. Since a greater proportion of the industry is made up of small size shipping operations the results are more indicative of these types of operations than the larger operations. Each question from the questionnaire is followed by a table that reports the results which in turn is followed by a brief explanation.

(b) Frequencies Based on Volume

Tables 34 through 31 represent information based on actual volume of shipments so therefore are more representative than corresponding tables in section (a).

(c) Off-Grade Potatoes

Tables 32 through 36 represent information on the volume and nature of potatoes graded out.

FINDINGS

(a) Frequencies

Q.1 Indicate by placing a check mark ( ) in the appropriate space below, the building that best describes the one that you use to pack and /or ship the potatoes you sell.

Building Used Exclusively for Packing ____
Building(s) Used for Both Storage and Packing ____
Do Not Have a Packing Line ____
Other (Specify)_____ ____

TABLE 1

TYPE OF BUILDING USED TO PACK AND/OR SHIP POTATOES

Building	%
Used Exclusively for Packing	17
Used for Both Storage and Packing	80
Bulk Only	3
	100% (N = 30)

Four-fiths of the shippers used their building(s) for both storage and packing.

Questions two through four were answered by shippers whose buildings were used exclusively for packing. This represents less than one-fifth (18%) of all the shippers in this study.

Q.2 In what year was this building built?

TABLE 2

YEARS THAT BUILDING WERE BUILT

YEAR	%
1983	20
1982	20
1978	20
1972	20
1970	20
	100% (N = 5)

Q.3(a) Have there been any additions made to the building since then?

TABLE 3(a)

ADDITIONS MADE TO THE BUILDING

RESPONSE	%
Yes	20
No	80
	100% (N = 5)

Q.3(b) If yes, in what year(s) were these additions made?

TABLE 3(b)

YEAR ADDITIONS WERE MADE

YEAR	%
1981	100
	100% (N = 1)

Q.4 Indicate by filling in the appropriate spaces listed below, the approximate size, in square feet, of the receiving area, work area and staging or holding area in your potato packing building.

Approximate Sq. Ft.

_____ Receiving Area
_____ Work Area
_____ Staging or Holding Area

TABLE 4

SIZE OF RECEIVING, WORK AND STAGING OR HOLDING AREAS IN THE BUILDING
(sq. ft.)

RECEIVING AREA	%
1,000	40
3,600	20
4,000	20
5,000	20
	100% (N = 5)

WORKING AREA	%
2,000	40
3,000	20
3,250	40
	100% (N = 5)

STAGING OR HOLDING AREA	%
2,000	20
2,500	40
3,250	20
4,290	20
	100% (N = 5)

Tables two through four show that the buildings, used exclusively for packing, were relatively new with little or no additions made thus far. The average size of each of the receiving, working and staging or holding areas was around 3,000 square feet.

Q.5 Indicate by placing a checkmark (✓) in the appropriate spaces below, the equipment you have in place in the building(s) used for packing potatoes and the estimated age of this equipment.

Equipment	In Place	Estimated Age
Holding Tank		
Forklift		

TABLE 5

EQUIPMENT USED IN PACKING OPERATIONS

TYPE OF EQUIPMENT	IN PLACE %	AVERAGE AGE YEARS	N
Holding Tank	33	4	10
Screen Sizer	73	8	22
Spool Sizer	43	8	13
Photo Sizer	3	1	1
Washer	47	5	14
Sponge Dryer	37	4	11
Forced Air Dryer	3	2	1
Brusher	93	9	28
Desprouter	20	6	6
Belt Grading Table	10	5	3
Roller Grading Table	97	8	29
Count Box Table	33	3	10
Weigh-O-Matic	33	4	10
Ag Pak	10	2	3
Hopper	57	6	17
Forklift	53	5	16

Almost all of the shippers had a brusher and a roller grading table. At least half to three-quarters had a forklift, hoppers and a screen sizer. Very few shippers had a photo sizer, forced air dryer, belt grading table or an ag pak.

All of the equipment had an average age of less than 10 years. The most popular equipment tended to have the oldest average age while the least popular equipment the youngest age.

Q.6 What percentage of your total supply of potatoes is usually supplied by each of the following?

	%
_____	Your Own
_____	Other Growers
_____	Other Shippers
	100%

TABLE 6

AVERAGE PERCENTAGE OF TOTAL SUPPLY SUPPLIED BY EACH SOURCE

SOURCE OF SUPPLY	%	
Own	61	
Other Growers	36	
Other Shippers	3	
	100%	(N = 30)

On average, a shipper supplied 61% of his or her total supply while 36% was supplied by other growers and 3% by other shippers.

Q.7(a) What percentage does each of the following types of packs account for in the present make up of the total volume of potatoes you sell?

%	Type of Pack
_____	Count Boxes
_____	Other (Specify) _____
100%	

TABLE 7(a)

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS THAT EACH TYPE OF PACK ACCOUNTS FOR

TYPE OF PACK	%
Count Boxes	9
Paper 5's	1
Paper 10's	29
Paper 20's	12
Paper 50's	29
Poly 5's	3
Poly 10's	3
Bulk	10
Other	6
	100% (N = 30)

On average, 58% of a shipper's total shipments were evenly made up of potatoes packed in 50 lb. and 10 lb. paper bags. Altogether, paper 5's, poly 5's and poly 10's accounted for 7% of total shipments.

Q.7(b) Has this percentage breakdown changed very much in the last three years?

Yes _____ No _____

TABLE 7(b)

MAKE UP OF TOTAL SHIPMENTS CHANGED IN THE LAST THREE YEARS

RESPONSE	%
Not Applicable	17
Yes	10
No	73
	100% (N = 30)

Only a handful of the shippers indicated that the make up of their total shipments changed very much in the last three years.

Q.7(c) If yes, what percentage would the following types of packs have accounted for in the make up of the total volume of potatoes you sold three years ago?

%	Type of Pack
__	Count Boxes
__	Other (Specify)_____
100%	

TABLE 7(c)

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS THAT EACH TYPE OF PACK ACCOUNTED FOR THREE YEARS AGO

TYPE OF PACK	%
Count Boxes	5
Paper 5's	1
Paper 10's	13
Paper 20's	10
Paper 50's	50
Poly 5's	0
Poly 10's	0
Bulk	23
Other	19
	100% (N = 3)

For the handful of shippers that did have a change in the breakdown of their total shipments, there appeared to be a movement away from paper 50's and "other" types of pack to paper 10's, count boxes and poly 5's and 10's.

When asked why the make up of total sales changed in the last year, the responses given were that due to the purchase of new equipment they were able to put up a greater variety of packs.

Q.8 What percentage of your total shipments is usually made up of each of the following?

	%
_____	Round Whites
_____	Long Varieties
_____	Reds
	100%

TABLE 8

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS MADE UP OF ROUND WHITES, LONG VARIETIES AND REDS

TYPE	%
Round Whites	47
Long Varieties	50
Reds	3
	100% (N = 30)

On average, long varieties and round whites accounted for approximately the same percentage of the make up of total shipments by a shipper.

Q.9 What percentage of your total shipments is usually made up of product that is:

	%
_____	Washed
_____	Brushed
_____	Neither Washed or Brushed
	100%

TABLE 9

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS MADE UP OF POTATOES THAT WERE WASHED, BRUSHED OR NEITHER WASHED OR BRUSHED

TYPE	%	
Washed	30	
Brushed	46	
Neither Washed or Brushed	24	
	100%	(N = 30)

On average, the largest percentage of total shipments by a shipper were made up of brushed potatoes (46%). Washed accounted for 31% and neither washed or brushed a total of 24%.

Q.10 What combination of packs can your line produce simultaneously?

_____

_____

TABLE 10

NUMBER OF PACKS OF POTATOES THAT CAN BE PRODUCED SIMULTANEOUSLY

NUMBER OF PACKS	%
1	40
2	7
3	32
4	7
5	0
6	14
	100% (N = 28)

Four out of five packing lines did not have the capability to produce more than three combinations of packs simultaneously.

Q.11 What percentage of your total shipments is usually made in each of the following months?

TABLE 11

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS SHIPPED BY MONTH

MONTH	%
August	3.7
September	4.5
October	7.2
November	9.7
December	8.7
January	9.9
February	10.7
March	14.6
April	13.6
May	10.7
June	5.4
July	1.3
	100.0% (N = 30)

On average, half of the shipments made by a shipper were usually between February 1 and May 31 each year.

Q.12 What percentage of your total shipments is usually made through and/or to each of the following?

%

____ Broker
____ Wholesaler
____ Retailer
____ Repacker
____ Other Shippers
____ Other (Specify) _____

100%

TABLE 12

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS MADE THROUGH AND/OR TO EACH CHANNEL OF DISTRIBUTION

CHANNEL	%
Broker	35
Wholesaler	23
Retailer	14
Repacker	5
Other Shippers	14
Other	9
	100% (N = 30)

On average, 35% of a shipper's shipments were made through brokers, 23% through wholesalers and 14% through both other shippers and retailers.

Q.13(a) What percentage of your total shipments is presently made to each of the following markets?

	%
_____	New Brunswick
_____	Newfoundland
_____	Quebec
_____	Ontario
_____	Eastern U.S. Seaboard
_____	Other (Specify) _____
	100%

TABLE 13(a)

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS SHIPPED TO EACH MARKET

MARKET	%
New Brunswick	21
Newfoundland	5
Quebec	28
Ontario	9
Eastern U.S. Seaboard	30
Other	7
	100% (N = 30)

On average, the eastern U.S. Seaboard (30%), Quebec (28%) and New Brunswick (21%) markets accounted for the largest percentage of shipments by a shipper.

Q.13(b) Has this percentage breakdown changed very much in the last three years?

Yes _____ No _____

TABLE 13(b)

PERCENTAGE OF TOTAL SHIPMENTS TO EACH MARKET CHANGED IN THE LAST THREE YEARS

RESPONSE	%	
Yes	16	
No	84	
	100%	(N = 25)

A small percentage (16%) of the shippers indicated that their percentage of total shipments to each market changed in the last three years.

Q.13(c) If yes, what would the percentage of your total shipments have been to each of the following markets three years ago?

%

_____ New Brunswick
_____ Newfoundland
_____ Quebec
_____ Ontario
_____ Eastern U.S. Seaboard
_____ Other (Specify) _____

100%

TABLE 13(c)

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS SHIPPED TO EACH MARKET THREE YEARS AGO

MARKET	%
New Brunswick	3
Newfoundland	6
Quebec	33
Ontario	14
Eastern U.S. Seaboard	30
Other	14
	100% (N = 4)

There appeared to be a shift from the Quebec, Ontario and "other" markets to the New Brunswick market.

The reasons given for a shift in markets were:

- others will supply potatoes cheaper and with better quality.
- lack of a proper marketing system.
- more sophisticated packing lines now in Quebec and Ontario.
- changing demand.
- Newfoundland markets are slow to pay.
- U.S. market very good due to the dollar.
- N.B. market starting to look good.

Q.14 What percentage of your total shipments to Quebec and/or Ontario is palletized?

%

_____ Quebec
_____ Ontario

TABLE 14

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS TO QUEBEC AND/OR ONTARIO THAT IS PALLETIZED

MARKET	%
Quebec	59 (N = 26)
Ontario	62 (N = 15)

On average, roughly 60% of shipments by a shipper to both Quebec and Ontario were palletized.

Q.15 What percentage of your total shipments to Quebec and/or Ontario would be palletized if you could rent pallets at reasonable rates?

%

____ Quebec
____ Ontario

TABLE 15

AVERAGE PERCENTAGE OF TOTAL SHIPMENTS TO QUEBEC AND/OR ONTARIO THAT WOULD BE PALLETIZED IF PALLETS COULD BE RENTED AT REASONABLE RATES

MARKET	%
Quebec	70 (N = 24)
Ontario	62 (N = 15)

No increase over the percentage of shipments already palletized was evident for the Ontario market. An additional 10% was indicated for palletized shipments into the Quebec market.

Q.16 Would you be in favour of a pallet rental system?

Yes _____ No _____

TABLE 16

SHIPPERS IN FAVOUR OF A PALLET RENTAL SYSTEM

RESPONSE	%
Yes	53
No	47
	100% (N = 30)

Slightly more than half of the shippers were in favour of a pallet rental system.

When asked why they were or were not interested in a pallet rental system, the shippers gave the following reasons:

- don't like pallets
- too expensive
- very little demand, will send their own at cost
- expensive plus would not help U.S. shipments
- if pallets could be rented at reasonable rates, it would be more convenient
- cheaper than purchase and maintenance costs
- more complicated to pile and takes more time

- sometimes hard to get
- to satisfy the customer and speed up delivery
- lose too many, a fee is placed on loads without pallets
- not equipped to handle pallets
- some customers requesting them, others don't want them
- depends on demand, if cheap enough and demand is there
- demand is increasing
- handier to deliver; less bag breakage
- control of cost
- have sufficient pallets
- transfer responsibility to someone else
- have had reasonable results with transport companies
- works okay as it is
- transport companies have their own pallet systems
- should be up to the transportation companies to supply pallets and figure the cost into the fixed rate if they find it too expensive
- would only work with co-operation between shippers and carriers. Carriers should have standard weight requirements per pallet.

Q.17 What is the approximate volume of shipments that your operation has made in each of the last three shipping seasons? (If your operation has been in business less than three years, just fill in the appropriate years.)

Volume
(cwt.)

_____ 1982-83
_____ 1981-82
_____ 1980-81

TABLE 17

AVERAGE VOLUME OF SHIPMENTS IN THE LAST THREE YEARS

YEAR	VOLUME (cwt)	
1982-83	82,686	(N = 30)
1981-82	81,086	(N = 27)
1980-81	80,165	(N = 23)

The average volume shipped by a shipper showed a slight increase in each of the last two years and was 82,686 cwt. per year in 1982-83.

Q.18 What is the maximum throughput capacity of your packing line per hour?

_____cwt.

TABLE 18

AVERAGE MAXIMUM THROUGHPUT CAPACITY OF ALL PACKING LINES

AVG. CAPACITY

122 cwt. (N = 28)

The average maximum throughput capacity of all the packing lines was 122 cwt. per hour.

Q.19 What was the average percentage grade out of the round whites, long varieties and/or reds graded out at your packing facility both this year and last year? (If you did not pack one or more of the three types, just leave the spaces blank that are not applicable.)

	Round Whites %	Long Varieties %	Reds %
1982-83	_____	_____	_____
1981-82	_____	_____	_____

TABLE 19

AVERAGE PERCENTAGE GRADE OUT OF ROUND WHITES, LONG VARIETIES AND/OR REDS GRADED IN 1982-83 AND 1981-82

YEAR	ROUND WHITES		LONG VARIETIES		REDS	
	%	N	%	N	%	N
1982-83	28	30	46	26	20	5
1981-82	21	25	24	23	21	8

Average percentage grade out was considerably higher in 1982-83 than in 1981-82. Grade out averaged 46% for long varieties and 28% for round whites in 1982-83.

Q.20 Of the potatoes graded out at your packing facility in both 1982-83 and 1981-82, what percentage were made up of each of the following?

1982-83 %	1981-82 %	
_____	_____	Smalls
_____	_____	Other(Specify)_____
100%	100%	

TABLE 20

AVERAGE PERCENTAGE MAKE UP OF POTATOES GRADED OUT IN 1982-83 AND 1961-82

	1982-83 %	1981-82 %
Small	29	42
Mechanical injury	13	16
Sunburn	6	6
Frost damage	1	1
Rot damage	4	6
Rough	17	11
Misshapen	28	15
Other	2	3
	100% (N=28)	100% (N=27)

On average, smalls accounted for the largest percentage of the total grade out in 1982-83 (29%) and 1981-82 (42%). Misshapen potatoes accounted for 28% of the total in the 1982-83 and 15% in 1981-82. Mechanically injured and rough potatoes also accounted for a notable share of the total grade out in both years.

Q.21 Of the potatoes graded out at your packing facility, in both 1982-83 and 1981-82, what percentage went to each of the following?

1982-83	1981-82	
%	%	
_____	_____	Dumped
_____	_____	Livestock Feed
_____	_____	Returned to Grower
_____	_____	Other (Specify) _____
100%	100%	

TABLE 21

AVERAGE PERCENTAGE OF TOTAL GRADE OUT THAT WAS DUMPED, USED AS LIVESTOCK FEED, RETURNED TO GROWER AND OTHER IN 1982-83 AND 1981-82

END USE	1982-83 %	1981-82 %
Dumped	46	40
Livestock Feed	44	51
Returned to Grower	9	8
Other	1	1
	100% (N=28)	100% (N=27)

On average, a slightly higher percentage of potatoes were dumped (46%) than used as livestock feed (44%) in 1982-83.

In 1981-82, over half of the potatoes graded out were used as livestock feed (51%) and 40% dumped.

Q.22 Indicate by placing a checkmark (✓) in the appropriate space(s) below, the type(s) of promotions you undertake:

_____ do not undertake any promotion
_____ your own advertising
_____ co-op advertising
_____ market servicing trips
_____ price discounting
_____ other (Specify) _____

TABLE 22

PERCENTAGE OF SHIPPERS THAT UNDERTAKE PROMOTIONAL ACTIVITIES, AND IF THEY DO, THE TYPE THEY UNDERTAKE

PROMOTIONAL ACTIVITIES	%	
Do not undertake any promotion	20	
Own advertising	50	
Co-op advertising	3	
Market servicing trips	53	
Price discounting	3	
Other	13	(N = 30)

A total of 80% of the shippers undertook some form of promotion. Market servicing trips and their own advertising were the most popular forms of promotion.

Q.23 How many people are employed at your packing and/or shipping facility when actively shipping? _____

Q.24 On average, how many days per year would your packing and/or shipping facility be in operation? _____

Q.25 How many years has your packing and/or shipping facility been in operation? _____

TABLE 23

AVERAGE NUMBER OF PEOPLE EMPLOYED, DAYS PER YEAR IN OPERATION AND NUMBER OF YEARS IN OPERATION

Average Number of People Employed	13
Average Number of Days Per Year in Operation	134
Average Number of Years in Operation	12

On average, each shipping operation employed 13 people, operated 134 days per year and had been in operation for 12 years.

(b) Frequencies Based on Volume of Shipments

TABLE 24

VOLUME OF TOTAL SUPPLY SUPPLIED BY EACH SOURCE

(cwt)

Source of Supply	1982-83 Vol.	%	1981-82 Vol.	%	1980-81 Vol.	%
Own	851,165	34	633,065	29	568,445	32
Other Growers	1,480,447	60	1,409,463	64	1,135,535	63
Other Shippers	148,977	6	146,800	7	89,820	5
TOTAL	2,480,589	100%	2,189,328	100%	1,793,800	100%

A large majority of total shipments was made up of potatoes supplied by other growers. Roughly one-third was supplied by the shippers themselves and a very small percentage by other shippers.

TABLE 25

VOLUME OF TOTAL SHIPMENTS BY TYPE OF PACK
(cwt.)

TYPE OF PACK	1982-83 Vol.	%	1981-82 Vol.	%	1980-81 Vol.	%
Count Boxes	375,345	15	256,975	12	172,625	10
Paper 5's	11,699	1	7,940	0	5,150	0
Paper 10's	815,568	33	735,902	34	636,670	35
Paper 20's	273,493	11	253,944	12	235,200	13
Paper 50's	449,259	18	437,079	20	334,495	19
Poly 5's	118,988	5	78,063	3	56,965	3
Poly 10's	107,642	4	74,595	3	50,000	3
Bulk	267,325	11	304,094	14	261,945	15
Other	59,621	2	39,086	2	39,100	2
	2,478,940	100%	2,187,678	100%	1,792,150	100%

About one-third of total shipments was made up of paper 10's. Paper 50's accounted for 18% while count boxes made up 15%. There appears to be a slight movement away from paper bags and bulk to poly bags and count boxes.

TABLE 26

VOLUME OF TOTAL SHIPMENTS MADE UP OF ROUND WHITES, LONG VARIETIES AND REDS
(cwt.)

TYPE	1982-83 Vol	%	1981-82 Vol	%	1980-81 Vol	%
Round Whites	1,003,109	40	983,594	45	813,580	45
Long Varieties	1,440,176	58	1,191,212	54	964,090	54
Reds	37,304	2	14,521	1	16,130	1
	2,480,589	100%	2,189,327	100%	1,793,800	100%

In 1982-83 long varieties accounted for 58% of total shipments, round whites made up 40% and reds only a very small percentage. The percentage of long varieties appears to be up over the previous two years.

TABLE 27

VOLUME OF TOTAL SHIPMENTS MADE UP OF PRODUCT THAT WAS WASHED, BRUSHED OR NEITHER WASHED OR BRUSHED
(cwt.)

	1982-83		1981-82		1980-81	
TYPE	Vol	%	Vol	%	Vol	%
Washed	1,180,784	48	893,390	41	668,150	37
Brushed	948,059	38	979,763	45	886,120	49
Neither Washed or Brushed	351,746	14	316,175	14	239,530	14
	2,480,589	100%	2,189,328	100%	1,793,800	100%

Nearly half of total shipments in 1982-83 were washed. Brushed potatoes accounted for a little less than 40% of the total and neither washed or brushed made up 14%. There appears to be quite a significant shift away from brushed to washed potatoes.

TABLE 28

VOLUME OF TOTAL SHIPMENTS MADE THROUGH AND/OR TO EACH CHANNEL OF DISTRIBUTION
(cwt.)

CHANNEL	1982-83 Vol.	%	1981-82 Vol.	%	1980-81 Vol.	%
Broker	1,178,753	48	1,325,512	61	1,077,625	60
Wholesaler	621,919	25	387,691	18	298,960	17
Retailer	179,276	7	115,655	5	114,725	6
Repacker	169,575	7	166,417	8	165,600	9
Other Shipper	101,925	4	74,535	3	50,690	3
Direct	219,079	9	113,697	5	82,000	5
Seed	3,117	0	2,970	0	3,000	0
TOTAL	2,473,644	100%	2,186,477	100%	1,792,600	100%

Shipments through brokers accounted for the majority of the total shipped in all three years. In 1982-83 wholesalers were the main channel of distribution for about one-quarter of total shipments. There appears to have been a shift away from brokers to wholesalers.

TABLE 29

VOLUME OF TOTAL SHIPMENTS TO EACH MARKET
(cwt.)

	1982-83		1981-82		1980-81	
MARKET	Vol	%	Vol	%	Vol	%
New Brunswick	296,213	12	230,131	11	209,925	12
Newfoundland	76,481	3	59,039	3	44,400	2
Quebec	676,444	27	631,088	29	611,160	34
Ontario	263,087	11	211,784	10	196,110	11
Eastern U.S. Seaboard	1,098,461	44	1,018,060	46	694,955	39
Other	69,903	3	39,225	1	37,250	2
TOTAL	2,480,589	100%	2,189,327	100%	1,793,800	100%

Shipments to the Eastern U.S. Seaboard accounted for the largest percentage of total shipments. The next largest market was Quebec followed by New Brunswick and Ontario. There appears to have been a shift from the Quebec market to the Eastern U.S. Seaboard market.

TABLE 30

VOLUME OF TOTAL SHIPMENTS TO QUEBEC AND ONTARIO THAT WERE PALLETIZED
(cwt.)

	1982-83			1981-82			1980-81		
MARKET	Volume Pall.	Total Ship.	%	Volume Pall.	Total Ship.	%	Volume Pall.	Total Ship.	%
Quebec	513,093	676,444	76	448,349	631,088	71	424,107	611,160	69
Ontario	202,257	263,087	77	160,135	211,784	76	151,955	196,110	77

About three-quarters of all shipments to Quebec and Ontario were palletized. This level remained about the same for the Ontario market in the three years but increased somewhat for shipments into the Quebec market.

TABLE 31

VOLUME OF TOTAL SHIPMENTS TO QUEBEC AND ONTARIO THAT WOULD BE PALLETIZED IF PALLETS COULD BE RENTED AT REASONABLE RATES
(cwt.)

	1982-83			1981-82			1980-81		
MARKET	Volume That Would Be Pall.	Total Shipments	%	Volume That Would Be Pall.	Total Shipments	%	Volume That Would Be Pall.	Total Shipments	%
Quebec	480,186	676,444	71	430,434	631,088	68	425,567	611,160	70
Ontario	198,107	263,087	75	170,385	211,784	80	171,640	196,110	88

The shippers indicated that there would be no increase in the volume of palletized shipments, to either the Quebec or Ontario markets, should pallets become available for rental at reasonable rates.

c) Off-Grade Potatoes

TABLE 32

VOLUME OF OFF-GRADE POTATOES BY REASON FOR BEING GRADED OUT
(cwt.)

	1982-83		1981-82	
REASON	Vol.	%	Vol.	%
Small	404,115	25	225,689	35
Mechanical Injury	259,573	16	156,119	25
Sunburn	94,190	6	38,231	6
Frost Damage	17,187	1	5,612	1
Rot Damage	53,224	3	38,091	6
Rough	334,552	20	57,616	9
Misshapen	461,904	28	98,876	16
Hollow Heart	19,406	1	11,657	2
Scab	-	0	1,920	0
	1,644,151	100%	633,811	100%

In 1982-83, misshapen and rough potatoes accounted for nearly half of the total volume of grade out. This can be attributed to the growing conditions for that year. In 1981-82 a "more normal" year, smalls accounted for the largest percentage (35%) of total grade out followed by mechanically injured (25%) and misshapen (16%).

TABLE 33

VOLUME OF ROUND WHITES, LONG VARIETIES AND REDS GRADED OUT IN 1982-83 AND 1981-82 BY PARISH
(cwt)

Parish	Round Whites		Long Varieties		Reds		Total	
	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82
Bright	3,562	1,398	390	371	130	124	4,082	1,893
Brighton	86,571	54,438	503,450	134,000	-	-	590,021	188,438
Clair	16,500	8,750	-	-	-	-	16,500	8,750
Denmark	25,042	19,375	46,292	33,929	-	-	71,334	53,304
Drummond	140,342	69,589	207,000	39,072	-	-	347,342	108,661
Dundas	2,042	1,795	5,775	1,783	-	-	7,817	3,578
Gordon	8,400	6,743	4,026	3,196	423	391	12,849	10,330
Grand Falls	4,396	-	37,410	-	2,976	-	44,782	-
Kent	DK*	DK	DK	DK	DK	DK	DK	DK
Peel	1,059	533	7,364	1,800	-	-	8,423	2,333
Perth	4,051	3,270	36,969	8,752	-	-	41,020	12,022
Shediac	5,992	6,617	-	-	-	-	5,992	6,617
St. Leonard	32,225	26,278	33,925	10,440	1,272	5,491	67,422	42,209
Wakefield	10,833	2,287	109,079	13,460	-	-	119,912	15,747
Wicklow	3,429	-	88,000	-	-	-	91,429	-
Wilmot	50,000	21,429	139,286	21,429	-	-	189,286	42,858
Woodstock	1,667	1,667	318,000	177,593	-	-	319,667	179,260
TOTAL	396,111	224,169	1,536,966	445,825	4,801	6,006	1,937,878	676,000

*DK - Shipper did not know percentage of grade out.

Total volume of grade out in 1982-83 (1,937,878 cwt.) was almost three times that in 1981-82 (676,000 cwt.), due mainly to adverse growing conditions. In 1981-82, the parishes of Brighton, Woodstock and Drummond accounted for 70% of the total volume of grade out. The parishes of Brighton, Drummond, Woodstock and Wilmot accounted for 75% of the total in 1982-83.

TABLE 34

VOLUME OF ROUND WHITES, LONG VARIETIES AND REDS GRADED OUT BY MONTH FOR 1982-83 AND 1981-82
(cwt)

Month	Round Whites		Long Varieties		Reds		Total	
	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82
August	8,499	4,627	39,184	7,931	10	10	47,693	12,568
September	10,031	4,801	83,088	17,437	5	5	93,124	22,243
October	21,381	13,195	132,780	37,994	323	889	154,484	52,078
November	35,940	19,787	159,066	46,459	812	632	195,818	66,878
December	38,481	21,022	166,987	47,859	431	555	205,899	69,436
January	50,879	28,314	149,317	48,183	282	555	200,478	77,052
February	44,400	25,557	143,942	45,432	322	592	188,664	71,581
March	54,339	30,375	202,360	52,270	890	682	257,589	83,327
April	55,515	30,679	218,576	57,379	960	689	275,051	88,747
May	45,429	28,471	141,883	56,059	600	869	187,912	85,399
June	29,307	16,534	86,599	28,484	161	523	116,067	45,541
July	1,910	807	13,184	338	5	5	15,099	1,151
TOTAL	396,111	224,169	1,536,966	445,825	4,801	6,006	1,937,878	676,000

Table 34 gives a breakdown of the volume of round whites, long varieties and reds graded out by month for 1981-82 and 1982-83. In 1981-82, volume of grade out ranged from a low of 1,151 cwt. in July to a high of 88,747 cwt. in April. In 1982-83, the range was from a low of 15,099 cwt. in July to a high 275,051 cwt. in April.

TABLE 35

END USE OF ROUND WHITES, LONG VARIETIES AND REDS GRADED OUT IN 1982-83 AND 1981-82
(cwt.)

END USE	Round Whites		Long Varieties		Reds		Total			
	1982-83	1981-82	1982-83	1981-82	1982-83	1981-82	1982-83	%	1981-82	%
Dumped	204,904	113,383	561,382	73,927	3,433	5,116	769,719	40	192,426	28
Livestock Feed	122,777	90,604	756,672	341,395	1,368	890	880,817	45	432,889	64
Returned to Grower	67,230	18,544	217,756	28,935	-	-	284,986	15	47,479	7
Other	1,200	1,638	386	1,568	-	-	1,586	0	3,206	1
TOTAL	396,111	224,169	1,536,196	445,825	4,801	6,006	1,937,108	100	676,000	100

Table 35 shows the volume of grade out, broken down by type of potato, that was dumped, used for livestock feed, returned to grower and other. In 1982-83, 45% of the total volume of grade out was used for livestock feed and 40% dumped. In 1981-82, 64% went for livestock feed and 28% dumped.

TABLE 36

VOLUME OF POTATOES GRADED OUT THAT WAS DUMPED, USED AS LIVESTOCK FEED AND/OR RETURNED TO THE GROWER IN 1982-83 AND 1981-82 BY PARISH
(cwt)

PARISH	DUMPED				LIVESTOCK FEED				RETURNED TO GROWER			
	1982-83	%	1981-82	%	1982-83	%	1981-82	%	1982-83	%	1981-82	%
Bright	-	-	-	-	4,083	0.5	1,893	0.4	-	-	-	-
Brighton	199,429	25.9	4,219	2.2	386,253	43.9	182,109	42.1	4,340	1.5	2,109	4.4
Clair	16,500	2.1	8,750	4.5	-	-	-	-	-	-	-	-
Denmark	35,912	4.7	21,068	10.9	4,946	0.6	5,149	1.2	30,476	10.7	25,565	53.9
Drummond	249,726	32.4	76,914	40.0	78,092	8.8	25,398	5.9	19,523	6.9	6,350	13.4
Dundas	781	0.1	358	0.2	7,036	0.8	3,221	0.7	-	-	-	-
Gordon	2,643	0.3	2,808	1.5	8,621	1.0	5,838	1.3	-	-	-	-
Grand Falls	42,095	5.5	-	-	2,688	0.3	-	-	-	-	-	-
Kent	DK*	DK	DK	DK	DK	DK	DK	DK	DK	DK	DK	DK
Peel	421	0.1	117	0.0	8,001	0.9	2,217	0.5	-	-	-	-
Perth	20,863	2.7	3,320	1.7	20,156	2.3	8,702	2.0	-	-	-	-
Shediac	719	0.1	1,191	0.6	5,273	0.6	5,426	1.3	-	-	-	-
St. Leonard	63,242	8.2	38,822	20.2	4,179	0.5	3,388	0.8	-	-	-	-
Wakefield	10,762	1.4	573	0.3	55,341	6.3	6,005	1.4	53,808	18.9	9,169	19.3
Wicklow	82,286	10.7	-	-	9,143	1.0	-	-	-	-	-	-
Wilmot	18,929	2.5	34,286	17.9	18,929	2.1	4,286	1.0	151,429	53.1	4,286	9.0
Woodstock	25,411	3.3	-	-	268,077	30.4	179,257	41.4	25,410	8.9	-	-
TOTAL	769,719	100.0%	192,426	100.0%	880,817	100.0%	432,889	100.0%	284,986	100.0%	47,479	100.0%

*DK - Shipper did not know percentage of grade out.

In 1982-83 almost 60% of the potatoes dumped were in the parishes of Drummond and Brighton. The parishes of Brighton and Woodstock accounted for 75% of the potatoes used for livestock feed and Wilmot and Wakefield accounted for the same percentage of potatoes returned to the grower. In 1981-82, the parishes of Drummond, St. Leonard and Wilmot accounted for more than 75% of the off-grade potatoes that were dumped. Brighton and Woodstock parishes accounted for over 80% of the total volume of potatoes graded out that were used for livestock feed and Denmark and Wakefield almost 75% of the off-grade potatoes returned to the grower.

SUMMARY

From an analysis of the data it appears that the New Brunswick Table Potato Shipping Industry is gradually changing. For whatever reasons this change is taking place, it is evident that two very different types of packing operations have emerged. Depending on how you look at it, the first could be described as being the medium size modern operation and the second, the smaller size older operation. The medium size modern operation represent, in many cases, the situtation where a number of growers build a packing plant and each owner supplies potatoes to the plant. The smaller size older operation represent grower shippers or family operations where, quite often, the potatoes are stored and packed in the same building. A large majority of the table potato packing operations in New Brunswick fall into the second category.

In terms of equipment used, it appears that very few have the necessary equipment to pack a variety of packs simultaneously. Some shippers though are now expanding their lines to include holding tanks, washers, count box tables, weigh-o-matics and ag paks, perhaps a response to changes in demand and competition.

Packing plants are heavily dependent upon a supply of potatoes from growers not associated with their operation. Some shippers voiced concern that it is increasingly becoming more difficult to obtain a steady source of supply. A partial solution to this problem might be for a number of shippers to work together to satisfy certain markets but very little of this has happened to date.

The make up of total shipments appeared to change slightly in the three years with a movement away from product packaged in paper bags toward that packaged in count boxes and poly bags. The percentage of potatoes sold in bulk appeared to be on the decline as well. Potatoes packaged in paper still made up the majority of total shipments with paper 10's the most popular followed by paper 50's and paper 20's.

There appeared to have been a shift from round whites to long varieties. This and many other of the trends evident in this report are probably due to the emergence of the medium size modern packing operation.

The percentage of total shipments made up of washed potatoes increased substantially while the percentage of brushed potatoes declined by the same amount in the three years. Washed shipments made up almost half of all shipments in 1982-83.

The biggest shift in terms of channels of distribution was from the broker to the wholesaler. Almost half of all shipments were still made through a broker though. There was a slight increase in the percentage of total shipments made direct with the end buyer.

The Eastern U.S. Seaboard market was New Brunswick's major market for the three years while shipments to Quebec declined during this time. Reasons given for this apparent shift from the Quebec to U.S. market include: value of the American dollar, move toward self-sufficiency in Quebec, increase in volume of shipments from Prince Edward Island into Quebec, a movement toward higher capacity more versatile packing plants able to satisfy high volume demand, and a generally low opinion of New Brunswick potatoes held by some buyers in Quebec.

The New Brunswick Potato Shippers Association requested that some idea of the level of support for a pallet rental system be generated. This study offered a convenient vehicle by which this could be done. Overall support for such a system was found to be divided with slightly more than half of the shippers in favor of it. No significant difference existed between the various sizes of packing operations and their support for a pallet rental system.

The off-grade potato information provided by this survey showed two very different situations. In 1982-83 grade out was significantly higher than 1981-82 primarily due to weather conditions. In 1982-83 there was a significantly higher percentage of rough and misshappen potatoes than in 1981-82. A viable market for potatoes that are graded out due to size and shape is needed to help alleviate the off-grade potato problem. At present, inspection regulations restrict the movement of some non-Canada No. 1 grade potatoes into certain markets. It was mentioned that the removal of these restrictions might help alleviate the off-grade potato problem.

The parishes of Brighton, Drummond, and Woodstock accounted for a substantial share of the total volume of off-grade potatoes. This of course is due to the volume of potatoes graded and packed in these locations. This can change substantially from year to year depending on the number of new operations opening up, existing operations either closing or reducing their volume of shipments, and the percentage of grade out in any particular year.

Months of the year when off-grade potatoes are available, of course, depends on volume of shipments, demand, supply, price, length of time potatoes are held in storage before grading, weather, and so on. Since the majority of shipments are made between January and May and grade out is generally higher during this time than before January, the volume of off-grade potatoes available was at its highest during this time.

The end use of off-grade potatoes was primarily livestock feed or dumped. The percentage used as livestock feed declined from 1981-82 to 1982-83, probably due to the increase in the total volume of grade out and volume dumped. There still remains a signficant volume of off-grade potatoes that could be better utilized if viable alternatives were available. Efforts appear to be most warranted in the Drummond, Brighton, Wicklow, St. Leonard and Wilmot parishes.

RECOMMENDATIONS

The results of this study are difficult to analyse without comparing them with the situation in a competing area or the demands of the marketplace. In order to maximize the usefulness of the information generated by this study it is highly recommended that the following be undertaken:

1. Collect similar information on the table potato industry in competing areas.

2. Determine the demands of the marketplace.

With this information a more complete analysis of the New Brunswick Table Potato Shipping Industry could be undertaken.

The data collected for this study has been computerized in case any further analysis is requested. More specific and detailed information can be made available covering areas such as:

- number of shipping operations by volume of shipments, capacity, staffing levels, days per year in operation, number of years in operation, and so on.

- size of shipping operations by markets shipped into, channels of distribution, percentage of washed, brushed or neither washed or brushed potatoes shipped, and so on.

APPENDIX A

COMMENTS FROM THE SHIPPERS

COMMENTS FROM THE SHIPPERS

- We need an outlet for potatoes that do not meet grade, starch, etc.

- I would have liked to have seen questions referring to our marketing system. I feel that that is the heart of our problems. I would suggest that your Government give serious consideration to the plan that the National Farmers Union is proposing, with:

  a. single desk selling
  b. equal opportunity to deliver
  c. pooling of prices

  It is the only thing in my mind that will help save the potato industry. Thank you for the opportunity to make these comments.

- 1. Bulk shipments of potatoes to repackers in other provinces should be eliminated.
  2. Uniform inspections must be imposed.
  3. Grades on long varieties should be changed to the U.S. grades.
  4. Improved equipment assistance to qualified packers.

- Need a factory where we could get rid of the potatoes that are not put on the market and those in surplus. This would pervent contamination from dumping the potatoes.

- If we could afford it, we need a new potato storage as it was built in 1944 so is outdated. Our machinery is outdated.

- First thing that must be done is how to deal with culls of a packing shed. Secondly, how can we compete with P.E.I. when the market is dull, they keep on shipping on consignment, regardless what the marketing board is telling us. They also have freight advantage when shipping overseas. Shipping to Upper Canada, the rate is about the same as it is from Grand Falls area. I believe there are too many grower/shippers. The Federal Potato Inspectors are at the point now where instead of working on our behalf, they dictate to us as to time we can load potatoes.

- 1. Farmers should be made more aware of how to eliminate bruise in potatoes.
  2. Shippers should be at the market to see their potatoes unloaded to realize the importance of packing properly.
  3. Trailers hauling potatoes could be painted in an attractive manner to promote N.B. potatoes.

4. Have a premium grade with superior packaging and promote it in the same manner as soft drink companies, toothpaste companies, etc. This would have to be on a smaller scale but surely a lot could be done with the budget of N.B. Potato Agency if organized properly.

- 1. To protect our seed industry and facilitate uniform cull disposal a starch factory is of the utmost importance.
  2. Assistance on inland freight for export or offshore export.
  3. Some protection to producers and shippers in regards to bankruptcies in marketplace.
  4. Less participation by DREE in regards to the building of large packing houses.

- We operate a family unit and sell our own crop completely. Mostly in small quantities. We sell our seed potatoes to market gardeners and in small packs to household gardeners. We endeavour to put up a pack to satisfy the consumer purchasing them. If we ever have any complaints, we try and look after them on a personal basis. We grow varieties which consumers ask for such as Green Mountain, Fundy, Keswick, Norland, Warba, Jemseg and Kennebec.

- Our marketing system will have to change drastically if N.B. potato industry is to survive. Recently, while in a large city, I would stand in vegetable stalls in grocery stores and fruit markets to observe the habits of potato customers. There were bulk, bagged, aluminium foil wrapped and market bulk bakers. Even though prices ranged from $1.39 N.B. 10 lb. to $2.39 10 lb. other provinces to $.39 lb. bulk and $.99 for 3 aluminum covered bakers on a tray, 95% of the women went for the bulk and bakers, even though they were much more in price. Price is not the object.

- I don't feel that centralized grading facilities are the long-term answer to recouping N.B.'s market share. The reasons being that the industry had central shippers 20 years ago and government policy advocated on farm grading. Now many farmer-shippers have such operations. To load and transport poatoes from storage to a central shed only increases the amount of fresh bruise and exposure to cold temperatures, therefore reducing the quality of product and reduction of return to the grower by way of more cull out. Many grower-shippers pack an excellent quality product and have years of experience backing up their excellent record. It is my feeling that if there were adequate

returns for the extra cull out that grower-shippers could and would market more than a quality product but a quality-plus product which is what the central grading sheds are doing at the expense of the grower who only gets paid for the potatoes that are in the bag. To achieve the quality-plus product which would put N.B. back into the market as a major supplier, I suggest that the N.B. industry have at its disposal a federally funded potato dehydration (instant mash) plant for culls and extra grade out. Considering all the federal tax dollars given to world food Ottawa could instead buy potato flakes from N.B. and donate the said flakes instead of our tax dollars. The whole industry would benefit from increased sales and increased quality (both seed and table) of the potatoes produced in this Province.

- It is absolutely necessary for me to change my packing method. You are very well informed about it in the material that I previously sent you.

- I don't employ anyone. The potatoes are bought from farmers and they do their own packing with their employees. The buyer should pay the cost of labour to the farmers and then be reimbursed with a grant by the Government.

- The fluctuating prices cause a lot of problems. The survey is really necessary for the big packing lines. I think that an assistance program would be really helpful if the money was put in the right place. This might even help bring back lost markets. For example, in Quebec, a number of large packing lines have been established under assistance programs paying up to 75% of buildings and equipment. The program is necessary as many farmers are in financial difficulties with their banks. Farmers want their money sooner than we are in a position to pay them.

- The survey won't give a solution to the problem because if the solution was evident then it would already be in progress.

- The New Brunswick potato growers are actually in a bad state and everybody seems to know where the trouble is but no one wants to participate in finding a solution and this has been going on for 75 years. As for myself, I have given ideas, my efforts, time and money to the industry and the results that I received are really disappointing.

- I disagree totally with the fixing of potato prices set at the beginning of each year. Last year, more potatoes could have been moved earlier at a price greater than that received at any other time of 1982-83 year.

- I think that an assistance program for the small shipper would be a very good thing. We have to encourage our farmers or shippers to pack potatoes here in the province. That way, we would have better control over our markets.

- We are presently operating at 30% of our capacity due to a tremendous increase in potato packing facilities. We now have a market situation where all markets are fevorishly approached by N.B. and P.E.I. shippers due to the construction of packing plants too numerous to mention as a result of recent years DREE grants, provincial grants, market development subsidies, etc.

- You now have a potato industry in N.B. severely overloaded with potato packing equipment and you have no known source of supply of potatoes. With the obvious realization that Russett Burbank grows in N.B. mainly as a processing potato and through federal stipulation is the only obvious solution is "Belrus" i.e., that is, if the feds have not discontinued the licensing of Belrus in N.B. and that is the only long type variety that I know of that has successfully competed in the marketplace and/or could compete without continued government assistance or strangulation in the near future.

- Being a N.B. producer and shipper, the average inferior quality of N.B. potatoes does affect us a little on the price that we get for our product. Our soil is right, with no rocks and is composed mostly of sand. That is why we pack a high-quality potato but with the publicity that is given to potatoes that are washed (with reason because of the rich soil), we still see ourselves with other expenses and with a product that has to be sold for less than the cost of production.

- I have gone to many meetings and told officials many times the best assistance I feel we could given the potato industry would be a market for grade-outs that offers a decent price. So when we are grading out these potatoes, there would not be such a hesitation to take out these culls and misshapen therefore putting out a much better #1 package on the market. Our potatoes would then be doing their own promotion. I think TV and newspaper advertising is very important. Get people eating more fresh potatoes. Advertise potatoes as a whole not putting one brand and one province against each other. Co-op advertising on the "potato".

- The N.B. potato industry is not well known outside the province. We were No. 1 five years ago and we are now No. 4 or 5. This is because of a lack of promotion, bad publicity and poor quality. It's a good thing there are still a lot of seed potato growers. We need promotion for table potatoes. The seviceman in Quebec (paid by the Government is not going to solve our problems. There is more to it than that. I'm not saying this just to complain, but to try and get a solution that might solve our problem.

- No real assistance exists to help farmers and the shippers of the products.

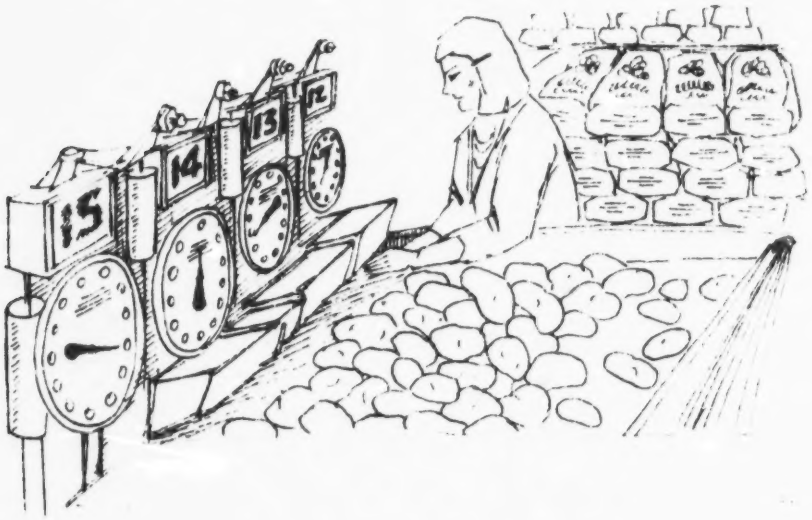
APPENDIX B

QUESTIONNAIRES

A PROVINCE-WIDE SURVEY OF NEW BRUNSWICK TABLE POTATO SHIPPERS

The purpose of this survey is to collect and provide the information required to develop a comprehensive description of the New Brunswick Table Potato Shipping Industry. Please answer all applicable questions. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins and at the end of the questionnaire. Your comments will be read and taken into account.

Thank you for your help.



N.B. GROWN
CULTIVÉ AU N.B.

Market Development Branch
N.B. Department of Agriculture and Rural Development
P.O. Box 6000
Fredericton, N.B.
E3B 5H1

SECTION I

The first set of questions deals with the building and equipment you use to receive, grade, package and/or ship the table potatoes you sell.

Q. 1 Indicate by placing a check mark (✓) in the appropriate space below, the building that best describes the one that you use to pack and/or ship the potatoes you sell.

_____ BUILDING USED EXCLUSIVELY FOR PACKING
_____ BUILDING(S) USED FOR BOTH STORAGE AND PACKING
_____ DO NOT HAVE A PACKING LINE
_____ OTHER (SPECIFY) _____

IF YOU CHOSE "BUILDING(S) USED FOR BOTH STORAGE AND PACKING" - SKIP TO Q. 5.

IF YOU CHOSE "DO NOT HAVE A PACKING LINE" OR "OTHER" - SKIP TO SECTION II ON PAGE 2.

IF YOU CHOSE " BUILDING USED EXCLUSIVELY FOR PACKING" - CONTINUE.

Q. 2 In what year was this building built? _____

Q. 3 (a) Have there been any additions made to the building since then?

_____ YES _____ NO → SKIP TO Q. 4

(b) If YES, in what year(s) were these additions made?

_____
_____
_____

Q. 4 Indicate, by filling in the appropriate spaces listed below, the approximate size, in square feet, of the receiving area, work area and staging or holding area in your potato packing building.

	APPROXIMATE SQ. FT.
_____	RECEIVING AREA
_____	WORK AREA
_____	STAGING OR HOLDING AREA

Q. 5 Indicate, by placing a check mark (✓) in the appropriate spaces below, the equipment you have in place in the building(s) used for packing potatoes and the estimated age of this equipment.

EQUIPMENT		IN PLACE	ESTIMATED AGE
HOLDING TANK		_____	_____ yrs.
SIZER:	SCREEN	_____	_____ yrs.
	SPOOL	_____	_____ yrs.
	PHOTO	_____	_____ yrs.
WASHER		_____	_____ yrs.
DRYER:	SPONGE	_____	_____ yrs.
	FORCED AIR	_____	_____ yrs.
BRUSHER		_____	_____ yrs.
DESPROUTER		_____	_____ yrs.
GRADING TABLE:	BELT	_____	_____ yrs.
	ROLLER	_____	_____ yrs.
COUNT BOX TABLE		_____	_____ yrs.
BAGGERS:	WEIGH-O-MATIC	_____	_____ yrs.
	AG PAK	_____	_____ yrs.
	HOPPER	_____	_____ yrs.
FORKLIFT		_____	_____ yrs.

SECTION II

The second set of questions deals with the product you package and/or sell.

Q. 6 What percentage of your total supply of potatoes is usually supplied by each of the following?

%	
_____	YOUR OWN
_____	OTHER GROWERS
_____	OTHER SHIPPERS
100%	

Q. 7 a) What percentage does each of the following types of packs account for in the present make up of the total volume of potatoes you sell?

%	TYPES OF PACKS
_____	COUNT BOXES
_____	5's PAPER
_____	10's "
_____	20's "
_____	50's "
_____	5's POLY
_____	10's "
_____	BULK
_____	OTHER (SPECIFY) _____
_____	_____
_____	_____
100%	

IF YOUR OPERATION HAS BEEN IN BUSINESS 2 YEARS OR LESS, SKIP TO Q. 8.
THOSE THAT HAVE BEEN OPERATING LONGER THAN 2 YEARS, PLEASE CONTINUE.

b) Has this percentage breakdown changed very much in the last 3 years?

_____ YES _____ NO → SKIP TO Q. 8

c) If YES, what percentage would the following types of packs have accounted for in the make up of the total volume of potatoes you sold 3 years ago?

%	TYPES OF PACKS
_____	COUNT BOXES
_____	5's PAPER
_____	10's "
_____	20's "
_____	50's "
_____	5's POLY
_____	10's "
_____	BULK
_____	OTHER (SPECIFY) _____
_____	_____
_____	_____
100%	

d) Please explain why the make up of your total sales has changed in the last 3 years?

_____

_____

_____

_____

Q. 8 What percentage of your total shipments is usually made up of each of the following?

%	
_____	ROUND WHITES
_____	LONG VARIETIES
_____	REDS
100%	

Q. 9 What percentage of your total shipments is usually made up of product that is :

%	
_____	WASHED
_____	BRUSHED
_____	NEITHER WASHED OR BRUSHED
100%	

THOSE SHIPPING OPERATIONS THAT DO NOT HAVE A PACKING LINE, SKIP TO SECTION III. THOSE THAT DO PACK, PLEASE CONTINUE.

Q. 10 What combinations of packs can your line produce simultaneously?

_____

_____

_____

SECTION III

The third set of questions deals with information on your shipments of potatoes.

Q. 11 What percentage of your total shipments is usually made in each of the following months?

%	
_____	AUGUST
_____	SEPTEMBER
_____	OCTOBER
_____	NOVEMBER
_____	DECEMBER
_____	JANUARY
_____	FEBRUARY
_____	MARCH
_____	APRIL
_____	MAY
_____	JUNE
_____	JULY
100%	

Q. 12 What percentage of your total shipments is usually made through and/or to each of the following?

%	
_____	BROKER
_____	WHOLESALER
_____	RETAILER
_____	REPACKER
_____	OTHER SHIPPERS
_____	OTHER (SPECIFY) _____
_____	_____
100%	

Q. 13 a) What percentage of your total shipments is presently made to each of the following markets?

%	
_____	NEW BRUNSWICK
_____	NEWFOUNDLAND
_____	QUEBEC
_____	ONTARIO
_____	EASTERN U.S. SEABOARD
_____	OTHER (SPECIFY) _____
_____	_____
100%	

IF YOUR OPERATION HAS BEEN IN BUSINESS 2 YEARS OR LESS, SKIP TO THE TOP OF PAGE 5. THOSE THAT HAVE BEEN OPERATING LONGER THAN 2 YEARS, PLEASE CONTINUE.

(b) Has this percentage breakdown changed very much in the last 3 years?

_____YES _____NO → [SKIP TO THE TOP OF PAGE 5]

(c) If YES, what would the percentage of your total shipments have been to each of the following markets 3 years ago?

%	
_____	NEW BRUNSWICK
_____	NEWFOUNDLAND
_____	QUEBEC
_____	ONTARIO
_____	EASTERN U.S. SEABOARD
_____	OTHER (SPECIFY) _____
_____	_____
100%	

(d) Please explain why you have changed markets in the last 3 years.

_____

_____

_____

_____

THOSE OPERATIONS THAT DO NOT SHIP INTO QUEBEC OR ONTARIO, SKIP TO Q. 16. THOSE THAT DO SHIP INTO QUEBEC OR ONTARIO, PLEASE CONTINUE.

Q. 14 What percentage of your total shipments to Quebec and/or Ontario is palletized?

%	
_____	QUEBEC
_____	ONTARIO

Q. 15 What percentage of your total shipments to Quebec and/or Ontario would be palletized if you could rent pallets at reasonable rates?

%	
_____	QUEBEC
_____	ONTARIO

Q. 16 a) Would you be in favour of a pallet rental system?

_____ YES _____ NO

b) Why or why not?

_____

_____

_____

_____

_____

_____

Q. 17 What is the approximate volume of shipments that your operation has made in each of the last 3 shipping seasons? (IF YOUR OPERATION HAS BEEN IN BUSINESS LESS THAN 3 YEARS, JUST FILL IN THE APPLICABLE YEARS.)

VOLUME (cwt)	
_____	1982-83
_____	1981-82
_____	1980-81

FOR THOSE SHIPPING OPERATIONS THAT DO NOT HAVE A PACKING LINE, SKIP TO SECTION V. THOSE THAT DO PACK, PLEASE CONTINUE.

Q. 18 What is the maximum throughput capacity of your packing line per hour?

_____cwt.

SECTION IV

The fourth set of questions deals with the potatoes that are graded out at your packing facility.

Q. 19 What was the average percentage grade out of the round whites, long varieties and/or reds graded at your packing facility both this year and last year? (IF YOU DID NOT PACK 1 OR MORE OF THE 3 TYPES, JUST LEAVE THE SPACES BLANK THAT ARE NOT APPLICABLE.)

	ROUND WHITES (%)	LONG VARIETIES (%)	REDS (%)
1982-83	_____	_____	_____
1981-82	_____	_____	_____

Q. 20 Of the potatoes graded out at your packing facility, in both 1982-83 and 1981-82, what percentage were made up of each of the following?

1982-83 (%)	1981-82 (%)	
_____	_____	SMALLS
_____	_____	MECHANICALLY INJURED
_____	_____	SUNBURNED
_____	_____	FROST DAMAGE
_____	_____	ROT DAMAGE
_____	_____	ROUGH
_____	_____	MISSHAPEN
_____	_____	OTHER (SPECIFY) _____
_____	_____	_____
_____	_____	_____
100%	100%	

Q. 21 Of the potatoes graded out at your packing facility, in both 1982-83 and 1981-82, what percentage went to each of the following?

1982-83 (%)	1981-82 (%)	
_____	_____	DUMPED
_____	_____	LIVESTOCK FEED
_____	_____	RETURNED TO GROWER
_____	_____	OTHER (SPECIFY) _____
_____	_____	_____
100%	100%	

SECTION V

The final set of questions deals with information on the operation of your shipping facility.

Q. 22 Indicate, by placing a check mark (✓) in the appropriate space(s) below, the type(s) of promotion you undertake:

_____ DO NOT UNDERTAKE ANY PROMOTION
_____ YOUR OWN ADVERTISING
_____ CO-OP ADVERTISING
_____ MARKET SERVICING TRIPS
_____ PRICE DISCOUNTING
_____ OTHER (SPECIFY) _____
_____ _____

Q. 23 How many people are employed at your packing and/or shipping facility when actively shipping?

_____

Q. 24 On average, how many days per year would your packing and/or shipping facility be in operation?

_____ DAYS

Q. 25 How many years has your packing and/or shipping facility been in operation?

_____ YEARS

Q. 26 If you would like to make any comments on the survey, assistance programs that you feel are required or problems in the shipping industry, please write them in the space provided below.

THANK YOU FOR YOUR TIME AND COOPERATION.

PLEASE FOLD THE QUESTIONNAIRE AND INSERT IT IN THE POSTAGE PAID, SELF-ADDRESSED ENVELOPE AND MAIL AT YOUR EARLIEST CONVENIENCE.